

Summary Page

Name of Facility Pinova, Inc.

NPDES Permit No. GA0003735

This permit is a modification of an existing NPDES permit for Pinova, Inc. This facility is a chemical production facility, and discharges an average of 7.1 MGD of once-through non-contact cooling water, cooling water blowdown with filter backwash, stormwater, process wastewater from internal outfall 002, and remediation wastewater from internal outfall 003. This facility discharges to Dupree Creek in the Satilla River Basin. The permit expires on July 31, 2022.

The permit was placed on public notice from July 15, 2021 to August 20, 2021.

Please Note The Following Changes to the Proposed NPDES Permit From The Existing Permit

Part I.A.1. – Effluent Limitations and Monitoring Requirements

- Changed the sampling point for enterococci from outfall 001 to internal outfall 002, based on information submitted with the permit modification application.
- Added a daily maximum enterococci limitation of 130 counts per 100 mL based on the receiving waterbody's designated use.
- Added a monitoring requirement for organic nitrogen, based on the wasteload allocation.
- Added a requirement that TKN, nitrate-nitrite, and organic nitrogen should be analyzed from the same effluent sample, based on the wasteload allocation.
- Added a requirement that total phosphorus and orthophosphate, as P should be analyzed from the same effluent sample, based on the wasteload allocation.

Standard Conditions & Boilerplate Modifications

The permit boilerplate includes modified language or added language consistent with other NPDES permits.

Final Permit Determinations and Public Comments

- Final issued permit did not change from the draft permit placed on public notice.
- Public comments were received during public notice period.
- Public hearing was held.
- Final permit includes changes from the draft permit placed on public notice. See attached permit revisions and/or permit fact sheet revisions document(s)

**Public Comments and EPD Responses on Draft NPDES Permit
Pinova Inc. – Permit No. GA0003735**

COMMENT RECEIVED	EPD RESPONSE
<p>There are not many vendors in our area that offer Enterococci sampling, [Pinova] currently has only one vendor that analyzes our Enterococci samples. The 6 hour hold time requirement for Enterococci samples precludes us from shipping samples overnight to another lab. Given these circumstances, we are currently unable to meet the once per week sampling requirement in the draft permit, as we do not yet have a lab that can analyze the samples. Is it possible to change the Enterococci sampling requirement to twice per month?</p>	<p>The federal regulations at 40 CFR 136, state the maximum hold time for Enterococci is 8 hours, which generally does preclude shipping the sample overnight. After the close of the public comment period, the permittee has provided information that they have secured a temporary location on Jekyll Island to comply with the permit limits. EPD appreciates the facilities commitment to comply with the permit conditions and requirements.</p>
<p>We are quite concerned about any polluted water being discharged in or our waterways. As well as the discharge in the air from this company. Our hope is that Georgia DNR-EPD will keep very strict guidelines on this company to ensure no tainted wastewater is dumped into our waterways. If we could be assured that every effective filtration system known be used and inspected and reported to EPD on a daily/weekly/monthly/annually to prove the filtration systems in place are accurately and effectively working seems like a responsible approach to monitoring this discharge.</p>	<p>This permit modification is to modify the compliance sampling point for Enterococci from external outfall no. 001 to internal outfall no. 002. Additional information regarding the permitting action can be found in section 4.4 of the proposed permit fact sheet.</p> <p>The remaining effluent limits and sampling frequencies have been retained from current permit issued in 2017. The facility’s emissions are permitted by the EPD’s Air Protection Branch under air quality permit no. 2861-137-0002-V-06-01.</p>



ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office

2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

Mr. Mike Crews, Senior Compliance Manager
Pinova, Inc.
2801 Cook Street
Brunswick, Georgia 31520

09/23/2021

RE: Permit Issuance
Pinova, Inc.
Permit No. GA0003735
Brunswick, Glynn County

Dear Mr. Crews:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division
Coastal District (Brunswick) Office
400 Commerce Center Drive
Brunswick, Georgia 31523

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Andrew Joyce at 470-524-0615 or andrew.joyce@dnr.ga.gov.

Sincerely,

Richard E. Dunn
Director

RED:adj

Enclosure(s)

cc: EPD Coastal District (Brunswick) Office – Brett Berry (e-mail)
EPD Watershed Planning and Monitoring Program, Mr. Josh Welte (e-mail)
EPD Watershed Planning and Monitoring Program, Mr. Tyler Parsons (e-mail)



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

National Pollutant Discharge Elimination System Permit

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

Pinova, Inc.
2801 Cook Street
Brunswick, Georgia 31520

is issued a permit to discharge from a facility located at

Pinova, Inc.
2801 Cook Street
Brunswick, Georgia 31520
Glynn County

to receiving waters

Dupree Creek in the Satilla River Basin.

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on September 25, 2020, any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This is a modification of the permit originally issued on July 27, 2017 and effective on August 1, 2017. This permit modification shall become effective on October 1, 2021.

This permit and the authorization to discharge shall expire at midnight July 31, 2022.



Richard E. Dunn, Director
Environmental Protection Division

PART I

A.1. Effluent Limitations and Monitoring Requirements

During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall number 001¹ (31.165833, -81.474722) – Once-through non-contact cooling water, cooling water blowdown with filter backwash, stormwater, process wastewater from internal outfall 002, and remediation wastewater from internal outfall 003.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics (Units)	Discharge Limitations				Monitoring Requirements ²		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	Report	Report			Continuous	Estimated	Final Effluent ³
BOD ₅	1,900	2,850	38	57	Monthly	Composite	Final Effluent ³
Total Suspended Solids			178	267	2/Week	Composite	Final Effluent ³
Ammonia, as N			1.3		Monthly	Grab	Final Effluent ³
Total Kjeldahl Nitrogen ⁴			Report	Report	Monthly	Grab	Final Effluent ³
Nitrate-Nitrite ⁴			Report	Report	Monthly	Grab	Final Effluent ³
Organic Nitrogen ⁴			Report	Report	Monthly	Grab	Final Effluent ³
Total Phosphorus ⁵			Report	Report	Monthly	Grab	Final Effluent ³
Orthophosphate, as P ⁵			Report	Report	Monthly	Grab	Final Effluent ³
Dissolved Oxygen (minimum)			5.0		Monthly	Grab	Final Effluent ³
Total Recoverable Copper (µg/L)			14.10	21.84	Monthly	Composite	Final Effluent ³
Carbon Tetrachloride (µg/L)			7.2		Monthly	Grab	Final Effluent ³
Toxaphene			0.00081		Monthly	Composite	Final Effluent ³
Total Organic Compounds			Report	Report	Monthly	Composite	Final Effluent ³

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored continuously.

- ¹ There shall be no discharge of floating solids or visible foam other than trace amounts.
- ² All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report in accordance with the reporting requirements in Part 1.D of this permit.
- ³ Sample location for outfall 001 is the culvert on the west side of Highway 17.
- ⁴ TKN, nitrate-nitrite, and organic nitrogen should be analyzed from the same effluent sample. Organic nitrogen shall be calculated as TKN minus NH₃.
- ⁵ Total phosphorus and orthophosphate, as P should be analyzed from the same effluent sample.

A.2. Effluent Limitations and Monitoring Requirements

During the period specified on the first page of this permit, the permittee is authorized to discharge from internal outfall number 002 – Clarifier effluent including wastewater used for washing raw materials, pine stumps, sluicing boiler ash, and operating wet air scrubbers.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics (Units)	Discharge Limitations				Monitoring Requirements ²		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	Report	Report			Continuous	Recorder	Clarifier Effluent
Total Suspended Solids	1068	1602			2/Week	Composite	Clarifier Effluent
Enterococci (#/100 mL) ³			35	130	1/ Week	Grab	Clarifier Effluent

- ¹ There shall be no discharge of floating solids or visible foam other than trace amounts.
- ² All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report in accordance with the reporting requirements in Part 1.D of this permit.
- ³ Enterococci will be reported as the geometric mean. The monthly geometric mean shall be calculated based on at least 4 samples taken during the monitoring period.

A.3. Effluent Limitations and Monitoring Requirements

During the period specified on the first page of this permit, the permittee is authorized to discharge from internal outfall number 003 – Plant soil remediation wastewater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics (Units)	Discharge Limitations				Monitoring Requirements ²		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	Report	Report			Continuous	Recorder	Effluent

- ¹ There shall be no discharge of floating solids or visible foam other than trace amounts.
- ² All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report in accordance with the reporting requirements in Part 1.D of this permit.

B. Monitoring

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. The permittee shall maintain a written sampling plan and schedule onsite.

2. Sampling Period

- a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.
- b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.
- c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

3. Monitoring Procedures

Analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

4. Detection Limits

All parameters will be analyzed using the appropriate detection limits. If the results for a given sample are such that a parameter is not detected at or above the specified detection limit, a value of "NOT DETECTED" will be reported for that sample and the detection limit will also be reported.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;
- b. The dates and times the analyses were performed, and the person(s) performing the analyses;
- c. The analytical techniques or methods used;
- d. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

7. Records Retention

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a minimum of three (3) years from the date of the sample, measurement, report or application, or longer if requested by EPD.

8. Penalties

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD

C. Definitions

1. The "daily average" mass means the total discharge by mass during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.
2. The "daily maximum" mass means the total discharge by mass during any calendar day.
3. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.
4. The "daily maximum" concentration means the daily determination of concentration for any calendar day.
5. A "calendar day" is defined as any consecutive 24-hour period.
6. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
7. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
8. "EPD" as used herein means the Environmental Protection Division of the Department of Natural Resources.
9. "State Act" as used herein means the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).
10. "Rules" as used herein means the Georgia Rules and Regulations for Water Quality Control.

D. Reporting Requirements

1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.
 - a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: <https://netdmr.epa.gov/netdmr/public/home.htm>
 - b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.
 - c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.
 - d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.
2. No later than December 21, 2025, the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:
 - a. Sewer Overflow/Bypass Event Reports;
 - b. Noncompliance Notification;
 - c. Other noncompliance; and
 - d. Bypass

3. Other Reports

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

4. Other Noncompliance

All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

5. Signatory Requirements

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

- a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:
 1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:
 - i. a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or
 - ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.
- b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:
 1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;
 2. The authorization is made in writing by the person designated under (a) above; and
 3. The written authorization is submitted to the Director.
- c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.
- d. Any person signing any document under (a) or (b) above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

PART II

A. Management Requirements

1. Notification of Changes

- a. The permittee shall provide EPD at least 90 days advance notice of any planned physical alterations or additions to the permitted facility that meet the following criteria:
 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
 3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. The permittee shall give at least 90 days advance notice to EPD of any planned changes to the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Following the notice in paragraph a. or b. of this condition the permit may be modified. The permittee shall not make any changes, or conduct any activities, requiring notification in paragraph a. or b. of this condition without approval from EPD.
- d. The permittee shall provide at least 30 days advance notice to EPD of:
 1. any planned expansion or increase in production capacity; or
 2. any planned installation of new equipment or modification of existing processes that could increase the quantity of pollutants discharged or result in the discharge of pollutants that were not being discharged prior to the planned change

if such change was not identified in the permit application(s) upon which this permit is based and for which notice was not submitted under paragraphs a. or b. of this condition.

- e. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 100 µg/L, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 µg/L for acrolein and acrylonitrile, 500 µg/L for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/L antimony.
- f. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a nonroutine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 500 µg/L, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/L antimony.
- g. Upon the effective date of this permit, the permittee shall submit to EPD an annual certification in June of each year certifying whether or not there has been any change in processes or wastewater characteristics as described in the submitted NPDES permit application that required notification in paragraph a., b., or d. of this condition. The permittee shall also certify annually in June whether the facility has received offsite wastes or wastewater and detail any such occurrences.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

3. Facility Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

a. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

1. A description of the discharge and cause of noncompliance; and
2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

b. Any diversion or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life, personal injury, or severe property damage; (ii) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if the permittee could have installed adequate back-up equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and (iii) the permittee submitted a notice as required above. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Sludge Disposal Requirements

Sludge shall be disposed of in accordance with the regulations and guidelines established by EPD, the Federal Clean Water Act, and the Resource Conservation and Recovery Act (RCRA). Prior to disposal of sludge by any method other than co-disposal in a permitted sanitary landfill, the permittee shall submit a sludge management plan to the Watershed Protection Branch of EPD for written approval. For land application of nonhazardous sludge, the permittee shall comply with the applicable criteria outlined in the most current version of EPD's "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. EPD may require more stringent control of this activity. Prior to land applying nonhazardous sludge, the permittee shall

submit a sludge management plan to EPD for review and approval. Upon approval, the plan for land application will become a part of the NPDES permit upon modification of the permit.

7. Sludge Monitoring Requirements

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported (in the unit of lbs) as specified in Part I.D of this permit.

8. Power Failures

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

9. Operator Certification Requirements

The permittee shall ensure that, when required, a certified operator is in charge of the facility in accordance with Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant operators And Laboratory Analysts Rule 43-51-6.(b)

10. Laboratory Analyst Certification Requirements

The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analyses for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant operators and Laboratory Analysts Act, as amended, and the Rules promulgated thereunder.

B. Responsibilities

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a discharge source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

2. Transfer of Ownership or Control

A permit may be transferred to another person by a permittee if:

- a. The permittee notifies the Director of EPD in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;
- b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and
- c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD's intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

3. Availability of Reports

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

4. Permit Modification

This permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or
- d. To comply with any applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:
 1. is different in conditions or more stringent than any effluent limitation in the permit; or
 2. controls any pollutant not limited in the permit.

5. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established pursuant to Section 307(a) of the Federal Clean Water Act for toxic pollutants, which are present in the discharge within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

The permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by EPD at least 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Management Practices

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage, in-plant transfer, process and material handling, loading and unloading operations, plant site runoff, and sludge and waste disposal.

14. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

15. Duty to Provide Information

- a. The permittee shall furnish to the EPD Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request copies of records required to be kept by this permit.

- b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

16. Duty to Comply

- a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) and is grounds for enforcement action; for permit termination; revocation and reissuance, or modification; or for denial of a permit renewal application. Any instances of noncompliance must be reported to EPD as specified in Part I. D and Part II.A. of this permit.
- b. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Georgia Water Quality Control Act (Act) also provides procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

17. Upset Provisions

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

PART III

A. Previous Permits

1. All previous State wastewater permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. Schedule of Compliance

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: N/A
2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

C. Special Conditions

1. The permittee shall utilize BMP (Best Management Practices) for Storm Water, as applicable, to minimize any residual toxaphene at the plant site from migrating to the permitted discharge of the plant ditch at Dupree Creek. The BMP is described in the December 2014 report entitled *Stormwater Best Practices Plan* as prepared by Pinova, Inc.
2. Chronic bio-monitoring shall be conducted on outfall 001 (plant ditch outfall) using a vertebrate species. Test procedures shall adhere to the U.S. EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluent in Receiving Water to Marine and Estuarine Organisms*. Bioassays shall be conducted on an annual basis utilizing definitive testing. One of the test solutions shall be run at the anticipated in-stream wastewater concentration of 25% total effluent. Bioassay results shall be submitted to the Division no later than fifteen (15) days following the end of the annual period.
3. The permittee shall dredge or otherwise remove sediment periodically from its basin associated with outfall 001 to ensure free flow of water and wastewater through and from its facility.
4. The permittee will confirm on an annual basis in writing that the cooling tower blowdown discharge water only contains nonmetallic and biodegradable chemicals for controlling algae and slime. The permittee must list the chemicals and amounts being added to the cooling tower and certify that the chemicals being added are nonmetallic and biodegradable. Chemical dosage must not exceed manufacturer's recommendations. Other chemicals must be approved by EPD prior to being used by the permittee.

D. Biomonitoring and Toxicity Reduction Requirements

1. The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with chapter 391-3-6-.03(5)(e) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, EPD may require the permittee to perform any of the following actions:

- a. Acute biomonitoring tests;
- b. Chronic biomonitoring tests;
- c. Stream studies;
- d. Priority pollutant analyses;
- e. Toxicity reduction evaluations (TRE); or
- f. Any other appropriate study.

2. EPD will specify the requirements and methodologies for performing any of these tests or studies. Unless other concentrations are specified by EPD, the critical concentration used to determine toxicity in biomonitoring tests will be the effluent instream wastewater concentration (IWC) based on the representative plant flow of the facility and the critical low flow of the receiving stream (7Q10). The endpoints that will be reported are the effluent concentration that is lethal to 50% of the test organisms (LC50) if the test is for acute toxicity, and the no observed effect concentration (NOEC) of effluent if the test is for chronic toxicity.

The permittee must eliminate effluent toxicity and supply EPD with data and evidence to confirm toxicity elimination.



The Georgia Environmental Protection Division proposes to issue an NPDES permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

Technical Contact: Andrew Joyce (*andrew.joyce@dnr.ga.gov*)
470-524-0615

- Draft permit:**
- First issuance
 - Reissuance with no or minor modifications from previous permit
 - Reissuance with substantial modifications from previous permit
 - Modification of existing permit
 - Requires EPA review
 - Designated as a major facility

Modification:

This is a modification to move the monitoring location for demonstrating compliance with the effluent limitation for enterococci bacteria from outfall 001 to internal outfall 002, as requested by Pinova, Inc. The facility provided sampling data demonstrating that bacteria from outside of the facility, conveyed via the City of Brunswick's stormwater during storm events and backflow from Dupree Creek, was able to enter the North ditch where outfall 001 is located. See section 4.4 of this fact sheet for more information.

1 FACILITY INFORMATION

1.1. NPDES Permit No.: GA0003735

1.2. Name and Address of Owner/Applicant

Pinova, Inc.
2801 Cook Street
Brunswick, Georgia 31520

1.3. Name and Address of Facility

Pinova, Inc.
2801 Cook Street
Brunswick, Georgia 31520
(Glynn County)

1.4. Location and Description of the discharge (as reported by applicant)

Outfall ID	Latitude	Longitude	Receiving Waterbody
001	31° 09' 56.99" N (31.165833)	81° 28' 28.99" W (-81.474722)	Dupree Creek

1.5. Production Capacity

Not applicable

1.6. SIC Code & Description

2861 – Gum and Wood Chemicals

1.7. Description of Industrial Processes

Pinova, Inc. operates a chemical production facility. Wood stumps are ground to matchstick-size pieces to prepare for extraction of rosin and terpene oils. The purified rosin is then modified by hydrogenation, disproportionation, esterification, and distillation to produce specialty resins. Process wastewater from internal outfall 002, soil remediation wastewater from internal outfall 003, cooling wastewaters, and stormwater are discharged to Dupree Creek through external outfall 001.

Pinova, Inc. also manufactures polyterpene resins and other specialty chemical blends; the resulting wastewaters from these processes are discharged to the Brunswick-Glynn County Joint Water & Sewer Commission's Academy Creek WPCP, which has an approved industrial pretreatment program under NPDES permit no. GA0025313.

1.8. Description of the Wastewater Treatment Facility

Outfall	Operation Description	Treatment Description
001	Non-contact cooling water, cooling tower blowdown, wastewater from internal outfalls 002 and 003, stormwater	Discharge to surface water
002 (internal)	Washing of wood stumps, reverse osmosis blowdown, boiler blowdown condensate, wet air scrubber operation, clarifier	Sedimentation, pH adjustment, flocculation, and clarification
003 (internal)	Soil remediation	Granular activated carbon adsorption using packaged treatment system

1.9. Type of Wastewater Discharge

- | | | | |
|-------------------------------------|---|-------------------------------------|------------|
| <input checked="" type="checkbox"/> | process wastewater | <input checked="" type="checkbox"/> | stormwater |
| <input type="checkbox"/> | domestic wastewater | <input type="checkbox"/> | other |
| <input checked="" type="checkbox"/> | combined (non-contact cooling water, boiler blowdown, steam condensate, RO backflush, soil remediation) | | |

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1.10. Characterization of Effluent Discharge as Reported by Applicant

(Form 2C, Section V, Part A only. Please refer to the application for additional analysis)

1.10.1. Outfall No. 001 - Process wastewater from internal outfall 002, once-through non-contact cooling water, cooling water blowdown with filter backwash, stormwater, and remediation wastewater from internal outfall 003.

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	58.0 ¹	7.1 ¹
Biochemical Oxygen Demand, _{5-day} (mg/L)	6.1	Not Provided
Total Suspended Solids (mg/L)	21	Not Provided
Temperature, Winter (°F)	62.96	Not Provided
Temperature, Summer (°F)	66.92	Not Provided
Ammonia (mg/L)	0.31	Not Provided
Total Phosphorus (mg/L)	1.9	Not Provided

¹ The daily maximum and daily average flow values reported in the permit application include the stormwater contributions from the North Ditch, South Ditch, Mill Pond, and the City of Brunswick. The average stormwater flow was calculated based off of the 20-year average rainfall, and the maximum stormwater flow was calculated based off of a 10-year, 24-hour storm event.

1.10.2. Internal Outfall No. 002 - Clarifier effluent including wastewater used for washing raw materials, pine stumps, sluicing boiler ash, and operating wet air scrubbers.

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	2.9	2.5
Biochemical Oxygen Demand, _{5-day} (mg/L)	2	Not Provided
Total Suspended Solids (mg/L)	2.4	Not Provided
Temperature, Winter (°F)	62.96	Not Provided
Temperature, Summer (°F)	66.92	Not Provided
Ammonia (mg/L)	0.69	Not Provided
Total Phosphorus (mg/L)	0.41	Not Provided

2 APPLICABLE REGULATIONS

2.1 State Regulations

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

2.2 Federal Regulations

Source	Activity	Applicable Regulation
Industrial (Non POTW)	Non-Process Water Discharges	40 CFR 122
		40 CFR 125
		40 CFR 127
		40 CFR 136
	Process Water Discharges	40 CFR 122
		40 CFR 125
		40 CFR 127
		40 CFR 136

2.3 Industrial Effluent Limit Guideline(s)

Not applicable

3 WATER QUALITY STANDARDS & RECEIVING WATERBODY INFORMATION

Section 301(b)(1)(C) of the Clean Water Act (CWA) requires the development of limitations in permits necessary to meet water quality standards. Federal Regulations 40 CFR 122.4(d) require that conditions in NPDES permits ensure compliance with the water quality standards which are composed of use classifications, numeric and or narrative water quality criteria and an antidegradation policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve, such as drinking water, fishing, or recreation. The numeric and narrative water quality criteria are deemed necessary to support the beneficial use classification for each water body. The antidegradation policy represents an approach to maintain and to protect various levels of water quality and uses.

3.1 Receiving Waterbody Classification and Information

Designated Water Use: The designated water use for the Dupree Creek is fishing.

[391-3-6-.03(6)]

Fishing

- (i) Dissolved Oxygen: A daily average of 6.0 mg/L and no less than 5.0 mg/L at all times for water designated as trout streams by the Wildlife Resources

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Division. A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times for waters supporting warm water species of fish.

- (ii) pH: Within the range of 6.0 - 8.5.
- (iii) Bacteria:
 - 1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 mL in lakes and reservoirs and 500 per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 mL for any sample. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
 - 2. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.
- (iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

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3.2 Ambient Information

Outfall ID	7Q10 (cfs)	1Q10 (cfs)	Hardness (mg/L as CaCO ₃)	Annual Average Flow (cfs)	Upstream Total Suspended Solids (mg/L)
001	Tidal	Tidal	≥500	Tidal	Data Unavailable ¹

¹ For the Reasonable Potential Analysis calculations, EPD used 10 mg/l as a conservative value.

3.3 Georgia 305(b)/303(d) List Documents

Dupree Creek (Terry and Dupree Creeks North of Torras Causeway to confluence with Back River, Brunswick) is listed as not supporting the designated use.

2020 Integrated 305(b)/303(d) List - Coastal Streams

Reach Name/ID	Reach Location/County	River Basin/ Use	Assessment/ Data Provider	Cause/ Source	Size/Unit	Category/ Priority	Notes
Terry and Dupree Creeks	Terry and Dupree Creeks North of Torras Causeway to confluence with Back River, Brunswick	Satilla	Not Supporting	Shellfishing Ban, Fish Tissue (Toxaphene like chlorinated camphenes)	3	4a	TMDLs completed Fish Tissue (Toxaphene like chlorinated camphenes) (2001), Shellfishing Ban (2001), Fish Tissue (Mercury) (2001). EPD needs to determine the "natural DO" for the area before it can be determined whether the dissolved oxygen criteria are being met.
GAR030702030209	Glynn	Fishing	1,3,5,9,55	NP, 11, 12	Miles		

3.4 Total Maximum Daily Load (TMDL)

A TMDL was developed for toxaphene in Terry and Dupree Creeks in 2001, after fish consumption guidelines were issued due to contamination. Due to previous toxophene production at the site, this facility is included in the TMDL. The aquatic life criterion for toxaphene is 0.0002 µg/L. Laboratory method detection limits for measuring toxaphene in organic wastewater (2 µg/L) are several orders of magnitude higher than both the current permit limit and the water quality standard. Ongoing superfund activities will provide further information to help quantify the toxaphene loads being released to Dupree Creek.

A TMDL was developed for dissolved oxygen in the Brunswick Harbor, based on violations of the numeric DO criteria in the Brunswick River and St. Simons Sound. This TMDL was revised in 2019, and assigns a wasteload allocation to Pinova, Inc. . The TMDL includes limits for ultimate oxygen demand (UOD), as well as seasonal limits for CBOD₅ and ammonia. These limits will be implemented upon permit reissuance when this permit expires on July 31, 2022.

This facility’s previous owner (Hercules, Inc.) was also listed in a 2001 TMDL for total mercury in the Satilla river basin. The TMDL states that it “accords the permitting authority a certain amount of discretion in incorporating these wasteload allocations into NPDES permits.” Current facility owner Pinova, Inc. has indicated on their permit application that mercury was “believed absent” in their discharge; therefore, no reasonable potential exists to contribute to an excursion above the water quality standard for mercury, and limits have not been included.

3.5 Wasteload Allocation Date

See Appendix A of the Fact Sheet

4 PERMIT CONDITIONS AND EFFLUENT LIMITATIONS

4.1 Water Quality Based Effluent Limitations (WQBELs) & Technology Based Effluent Limits (TBELs)

When drafting a National Pollutant Discharge Elimination System (NPDES) permit, a permit writer must consider the impact of the proposed pollutants in a discharge on the quality of the receiving water. Water quality goals for a waterbody are defined by state water quality criteria or standards. By analyzing the effect of a pollutant in the discharge on the receiving water, a permit writer could find that technology-based effluent limitations (TBELs) alone will not achieve the applicable water quality standards or protect downstream users. In such cases, the Clean Water Act (CWA) and its implementing regulations require development of water quality-based effluent limitations (WQBELs). WQBELs help meet the CWA objective of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters and the goal of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water (fishable/swimmable).

WQBELs are designed to protect water quality by ensuring water quality standards are met in the receiving water and the designated use and downstream uses are protected. On the basis of the requirements of 40 C.F.R. §125.3(a), additional or more stringent effluent limitations and conditions, such as WQBELs, are imposed when TBELs are not sufficient to protect water quality.

TBELs aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the State. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and WQBELs. The NPDES regulations at 40 C.F.R. §125.3(a) require NPDES permit writers to develop technology-based treatment requirements, consistent with CWA section 301(b), that represent the minimum level of control that must be imposed in a permit. The regulation also requires permit writers to include in permits additional or more stringent effluent limitations and conditions, including those necessary to protect water quality.

For pollutants not specifically regulated by Federal Effluent Limit Guidelines (ELGS), the permit writer must identify any needed TBELs and utilize best professional judgment to establish TBELs or determine other appropriate means to control its discharge if there is a reasonable potential to cause or contribute to a violation of the water quality standards.

4.2 Reasonable Potential Analysis (RPA)

EPA regulations at 40 C.F.R. §122.44(d)(1)(i) state, “Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the

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Director determines are or may be discharged at a level that will *cause*, have the *reasonable potential to cause*, or *contribute* to an excursion above any [s]tate water quality standard, including [s]tate narrative criteria for water quality.” [emphasis added]

EPA regulations at 40 C.F.R. §122.44(d)(1)(ii) require States to develop procedures for determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative or numeric criterion within a state water. If such reasonable potential is determined to exist, the NPDES permit must contain pollutant effluent limits and/or effluent limits for whole effluent toxicity. Georgia has reasonable potential procedures, based upon the specific category of pollutants and/or specific pollutant of concern. Chemical specific and biomonitoring data and other pertinent information in EPD’s files will be considered in accordance with the review procedures specified in the GA Rules and Regulations for Water Quality Control, Chapter 391-3-6 in the evaluation of a permit application and in the evaluation of the reasonable potential for a discharge to cause an exceedance in the numeric or narrative criteria.

The term “pollutant” is defined in CWA section 502(6) and 40 C.F.R. §122.2. Pollutants are grouped into three categories under the NPDES program: conventional, toxic, and nonconventional. Conventional pollutants are those defined in CWA section 304(a)(4) and 40 C.F.R. §401.16 (five day-biochemical oxygen demand (BOD₅), total suspended solids (TSS), fecal coliform, pH, and oil and grease). Toxic (priority) pollutants are those defined in CWA section 307(a)(1) and include 126 metals and manmade organic compounds. Nonconventional pollutants are those that do not fall under either of the above categories (conventional or toxic pollutants) and include parameters such as, but not limited to, chlorine, ammonia, nitrogen, phosphorus, chemical oxygen demand (COD), and whole effluent toxicity (WET).

EPD evaluates the data provided in the application and supporting documents. If a pollutant is listed in the following sections of this fact sheet below, the permit writer determined the pollutant is a pollutant of concern and there may be a reasonable potential to cause or contribute to an instream violation of the Georgia water quality standards. If a pollutant is not listed below, EPD determined the pollutant is not a pollutant of concern or has determined, based on the data provided in the application, there is no reasonable potential to cause or contribute to an instream violation of the Georgia water quality standards. An example may be if the applicant reported “not detect” or “below detection limit”.

Upon identification of a pollutant of concern by the permit writer, in accordance with 40 C.F.R. §122.44(d)(1)(ii), the permit writer must then perform a reasonable potential analysis using a procedure which has accounted for any combination of the following criteria: existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water to determine if the pollutant and its discharge has the reasonable potential to cause, or contribute to an in-stream excursion above the allowable ambient concentration of a state narrative or numeric criteria within the state’s water quality standard for an individual pollutant.

In accordance with 40 C.F.R. §122.44(d)(1)(iii), if the permit writer has determined, using a reasonable potential procedure the pollutant of concern in the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a state numeric or narrative criteria within a state water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant. If the permit writer has determined there is insufficient data, the permit writer might also consider monitoring requirements to collect the additional data related to the presence or absence of a specific pollutant to provide information for further analyses for the development of appropriate numeric or narrative standard .

The conventional, nonconventional, and toxic pollutants listed in the following sections have been identified by the permit writer as pollutants of concern and the permit writer has determined through current practices and procedures one of the following: no additional monitoring or numeric and/or narrative effluent limits are needed; additional monitoring is required; or numeric and/or narrative effluent limits are necessary to protect the receiving water body and its downstream users and those limits have been included in the permit.

The monitoring and sampling locations are prescribed in the permit and determined by the permit writer after considering, at a minimum, the following: type of discharge, specific pollutant, discharge frequency, location of the discharge, receiving waterbody, downstream users, etc.

The sample type, grab vs. composite, is prescribed in the permit and determined by the permit writer after considering, at a minimum, the analytical method required in 40 C.F.R. §136, the type of pollutant, retention time, etc. Grab samples are required for the analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), or volatile organics.

4.3 Whole Effluent Toxicity

The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with chapter 391-3-6-.03(5)(e) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, EPD may require the permittee to perform acute or chronic whole effluent toxicity testing.

Chronic WET tests measure the effect of wastewater on indicator organisms' growth, reproduction, and survival. Effluent toxicity is predicted when the No Observable Effect Concentrations for a test organism is less than the facility's Instream Wastewater Concentration (IWC).

Chronic WET testing, utilizing the *Inland Silverside Larval Survival and Growth Test* was conducted in December 2016.

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Results of the aquatic biomonitoring tests indicated no statistically significant effect on survival and growth at up to 100% effluent concentration (i.e., NOEC > IWC). No toxic effects were detected.

4.4 Conventional Pollutants

Pollutants of Concern	Outfall ID	Basis
-----------------------	------------	-------

Enterococci	002 (internal)	<u>WQBEL</u> Based on the facility’s 2017 WLA, a daily average enterococci effluent limit of 35 #/100 mL was recommended. The sampling point for demonstrating compliance with this limit is being changed from outfall 001 to internal outfall 002, based on information submitted with the permit modification application. The September 15, 2020 memorandum included with the application contains supplemental data showing that levels of enterococci, conveyed via the City of Brunswick’s (City) stormwater during storm events and backflow from Dupree Creek into the ditch of outfall 001 during high tides appear to be the source of bacteria found in the effluent discharged through outfall 001.
-------------	-------------------	---

The facility engaged EPD in 2018 to discuss the permit requirements for bacteria. EPD required the facility to investigate and perform an extensive sampling study to determine the sources of bacteria present in the wastewater discharged from outfall 001. The facility sampled 4 locations believed to be contributing bacteria discharged from outfall 001. Throughout the extensive study, the facility was able to track the sources of bacteria back to contributions from stormwater from the City of Brunswick entering the site on the North side of the facility. The City’s stormwater uses the same conveyance ditches along the North side of the facility to reach Dupree Creek. The study identified a leaking sewage pump station and it has since been repaired. The study also found that, due to high tides, brackish water is able to enter the ditches on both the North and South sides of the facility twice per day.

Lastly, the study identified process wastewater coming from the South side of the facility, comprised of clarifier wastewater used for washing raw materials, pine stumps, sluicing boiler ash, and wet air scrubbers was an additional source of bacteria.

Based on EPD’s review of the study results, there is sufficient evidence to demonstrate that bacteria from sources outside of the facility is present at the sampling point for outfall 001.

Therefore, the sampling location for enterococci is being moved to internal outfall 002, to ensure that only the contributions from the Pinova facility are being considered when demonstrating compliance with the enterococci limits.

TBEL

There is no applicable federal technology based effluent limit.

4.5 Technology Based Effluent Limitation Calculations

There are several ways to calculate TBELs when developing case-by-case limitations. EPD can use an approach consistent with the statistical approach EPA has used to develop effluent guidelines or they can utilize several other mathematically and statistically accepted approaches depending on characteristics of the data. In general, EPD utilizes EPA’s “NPDES Permit Writer Manual,” September 2010, Section 5.2.3, “Case-by-Case TBELs for Industrial Dischargers” and EPA’s “Technical Support Document for Water Quality Based Toxic Control,” March 1991, Section 5.2, “Basis Principles of Effluent Variability,” as guidance to develop limits.

If applicable, when there is no federal technology based effluent limit EPD evaluates the effluent data, operating records and discharge monitoring reports to calculate the long term average for the parameter. The long term average is then used to derive the effluent limits.

EPD recognizes there are several ways to calculate technology based limits and, when applicable, may deviate from the general practice.

4.6 Comparison & Summary of Water Quality vs. Technology Based Effluent Limits

After preparing and evaluating applicable technology-based effluent limitations and water quality-based effluent limitations, the most stringent limits are applied in the permit. Pollutants of concern with an effluent limit of monitor and report are not included in the below table.

Outfall 002 (internal):

Parameter	WQBELs	TBELs	Explanation
Enterococci (#/100 mL)	35/130	None	WQBEL – WLA

5 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

5.1 Special Conditions

1. The permittee shall utilize BMP (Best Management Practices) for Storm Water, as applicable, to minimize any residual toxaphene at the plant site from migrating to the

permitted discharge of the plant ditch at Dupree Creek. The BMP is described in the December 2014 report entitled *Stormwater Best Practices Plan* as prepared by Pinova, Inc.

2. Chronic bio-monitoring shall be conducted on outfall 001 (plant ditch outfall) using a vertebrate species. Test procedures shall adhere to the U.S. EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluent in Receiving Water to Marine and Estuarine Organisms*. Bioassays shall be conducted on an annual basis utilizing definitive testing. One of the test solutions shall be run at the anticipated in-stream wastewater concentration of 25% total effluent. Bioassay results shall be submitted to the Division no later than fifteen (15) days following the end of the annual period.
3. The permittee shall dredge or otherwise remove sediment periodically from its basin associated with outfall 001 to ensure free flow of water and wastewater through and from its facility.
4. The permittee will confirm on an annual basis in writing that the cooling tower blowdown discharge water only contains nonmetallic and biodegradable chemicals for controlling algae and slime. The permittee must list the chemicals and amounts being added to the cooling tower and certify that the chemicals being added are nonmetallic and biodegradable. Chemical dosage must not exceed manufacturer's recommendations. Other chemicals must be approved by EPD prior to being used by the permittee.

5.2 Anti-Backsliding

The limits in this permit are in compliance with 40 C.F.R. 122.44(l). 40 C.F.R. 122.44(l)(2)(i)(B(1) states, permit limits may be less stringent if "Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance." Supporting documentation and additional data provided with the permit application resulted in EPD's evaluation of the numeric effluent limit for enterococci placed in the permit issued on July 24, 2017 for outfall 001. EPD has evaluated the additional data as stated above in Section 4.4 of the fact sheet. Based on the results of our evaluation, EPD has moved the sampling point for demonstrating compliance with the numeric enterococci limit from outfall 001 to internal outfall 002.

6 REPORTING

The facility has been assigned to the following EPD office for reporting, compliance and enforcement.

Georgia Environmental Protection Division
EPD Coastal District (Brunswick) Office
400 Commerce Center Drive
Brunswick, Georgia 31523

6.1 E-Reporting

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

7 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

8 PERMIT EXPIRATION

The permit will expire five years from the effective date.

9 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

9.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue a permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Georgia Environmental Protection Division
Wastewater Regulatory Program
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday and on EPD's website accessible through the publicly available Georgia EPD Online System (GEOS) at: <https://geos.epd.georgia.gov/GA/GEOS/Public/GovEnt/Shared/Pages/Main/Login.aspx>. For additional information, you can contact 404-463-1511.

9.2 Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at EPDcomments@dnr.ga.gov within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

9.3 Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.06(7)(b). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

9.4 Final Determination

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

<http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0>

9.5 Contested Hearings

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.

APPENDIX A – Wasteload Allocation

National Pollutant Discharge Elimination System Wasteload Allocation Form

Part I: Background Information

WLA Request Type: Reissuance Expansion Relocation New Discharge
 Facility Name: Hercules/ Pinova WPCP County: Glynn WQMU: 0712
 NPDES Permit No.: GA0003735 Expiration Date: 10/4/2016 Outfall Number: 001
 Receiving Water: Dupree Creek River Basin: Satilla 10-Digit HUC: 0307020302
 Discharge Type: Domestic Industrial Both Proportion (D:I): _____ Flow(s) Requested (MGD): No limit
 Industrial Contributions Type(s): Industrial cooling water, process water from clarifier, pretreatment discharge from soil remediation
 Treatment Process Description: Sedimentation, pH adjustment, flocculation and clarification
 Additional Information: (history, special conditions, other facilities):
 Requested by: Alan Leake Title: EE Program: WRP
 Telephone: 404-463-4936 Date: 09-6-2016

Part II: Receiving Water Information

Receiving Water: Dupree Creek Designated Use Classification: Fishing
 Integrated 305(b)/303(d) List: Yes No Partial Support: Not Support: Criteria: SB, FCG (toxaphene like chlorinated camphenes)
 Total Maximum Daily Load: Yes No Parameter(s): toxaphene WLA Complies with TMDL: Yes No
 This receiving water segment is listed also for Assessment pending for Dissolved Oxygen
 Draft TMDL for Enterococci in the Satilla Basin (2016) indicate potential impact of discharge to coastal beach

Part III: Water Quality Model Review Information

Model Type: Uncalibrated Calibrated Verified Cannot be Modeled Model Length (mi): _____
 Field Data: None Fair Good Excellent
 Model and Field Data Description: Combined Satilla River (LSPC) and Brunswick Harbor (EFDC) water quality model March 2014
 Critical Water Temperature (°C): _____ Drainage Area (mi²): _____ Freshwater Flow (cfs): _____ Tidal
 7Q10 Yield (cfs/mi²): _____ Velocity (range fps): _____ Tidal Dispersion Coefficient (mi²/day): _____
 Effluent Flow Rate (cfs): _____ Dilution (%): N/A Cross Sectional Area (t - ft²): _____
 Slope (range - fpm): _____ K1: _____ K3: _____ K2: _____ Depth (ft): _____
 Salinity (mg/L): 1,000 - 30,000 BOD₅/BOD₂₀: _____ SOD: _____ Background Hardness (mg/L as CaCO₃): > 500

There were no previous modeling analysis found. However, the updated model did not show an exceedance of the allowable DO variance from the estimated natural condition with the effluent limit established below. Currently there are no established critical condition natural DO conditions in the receiving water segment.

Part IV: Recommended Permit Limitations and Conditions (mg/L as a monthly average except as noted)

Rationale: Same as current Revised New
 Location: Dupree Creek (existing)

Effluent Flow Rate (MGD)	BOD ₅ (lbs/day)	NH ₃ -N	DO _(min)	Enterococci (#/100 mL (geomean))	pH (std. units)	Total Phosph.	Ortho Phosph.	Organic Nitrogen	Total Kjeldahl Nitrogen	Nitrate-Nitrite
No limit	1900	1.3	5	35	6.0 - 9.0	Monitor	Monitor	Monitor	Monitor	Monitor

Additional Comments:

Priority pollutant permit limits and aquatic toxicity testing requirements are to be determined by WRP.

- Facility to conduct effluent nutrient monitoring once a month in accordance with the effluent monitoring strategy for all permitted discharges to establish future instream nutrient standards. TKN, nitrate-nitrite, and organic nitrogen should be analyzed from the same effluent sample. Total phosphorus and Ortho-phosphorus should be analyzed from the same effluent sample.
- The Enterococci limit is recommended since Pinova discharge is within 25 miles from Clam Creek Beach, which is listed on the 2014 303(d) List as not meeting its designated use for Enterococci. A draft Enterococci TMDL for this beach was issued in June 2016 for public comments and the Enterococci limit is equivalent to the geometric mean Enterococci water quality criteria.
- The new ammonia limit meets the 1989 EPA Ambient Water Quality Criteria for Ammonia (Saltwater).
- Hardness value has been revised.

Prepared by: William Wang Date: 11/22/2016 Reviewed by: Josh Weite Date: 12/21/16

Part V: Program Manager Comments

Elizabeth Booth
 Elizabeth Booth

WRP: Industrial Permit File

County: Glynn

Permit No. GA0003735

Date: 12/21/16

Name: Pinova, Inc.

APPENDIX B – Facility Map

